



Electronic Component Market Outlook

Q3 August 2021

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Executive Summary

The theme for the Q3 Market update continues the previous theme of lead times stretching and increasing prices. There is insufficient production capacity which is making deliveries unstable and delinquent. In some instances, it is difficult to receive a confirmation date for new and existing orders. Spot buy pricing can increase the pricing and the challenges facing the electronic components supply chain is not expected to be resolved this year.

The demand for electronic components continues to increase globally in 2021. The main drivers for this demand continues to be the investment in 5G and IOT and the increased requirement for “working from home” IT infrastructure equipment such as PC's, Tablets and consumer electronics. Globally there has been a large investment in the medical market plus a recovery in the automotive and industrial segments.

Lead times are much higher than they were in 2020 and the outlook through the first half of 2021 suggests that we will face shortages for an extended period. There are also raw material shortages and transportation capacity issues all helping to fuel price increases and instability in deliveries. High bookings and demand have stretched the capacity at the suppliers who have quickly reached utilization, thus extending lead times further, in some cases above 50 weeks plus.





The Market at a glance

- Material availability is more challenging than ever before. Metals, Resins, Packaging and finished materials such as aluminum and polypropylene foil have become scarce as supply chains struggle with high demand.
- Lack Of Air Freight availability has pushed Suppliers to use Sea Freight more than ever before. We are seeing transportation and delivery extensions by up to 10-12 weeks in some cases
- Labour challenges are still impacting some suppliers on a case-by-case basis. In Malaysia, India and Taiwan we have seen restrictions in movement of labour also impact capacity levels at some plants. Due to the lockdown in Malaysia in June all factories have been running at maximum 60-70% capacity.
- Recent power outages in China are also impacting capacity utilization in some areas. The recent flooding in Europe did not cause any major negative effects on the supply chain.
- “The Semiconductor shortage will severely disrupt the supply chain and will constrain the production of many electronic equipment types in 2021. Foundries are increasing wafer prices, and in turn, chip companies are increasing device prices” Chip shortage to persist until 2Q2022. Source Gartner

Key Component Outlook

Memory

Memory manufacturers are noting increased lead times and price increases. The market is very tight and volatile. All packages are constrained and forecasts for 2022 are being requested in order to secure future needs. There are no lead times for ISSI 2D Nand as there is no die to support the demand.

IC's

Surging demand across multiple industries – amid constrained wafer supply and exacerbated by a scarcity of raw materials – has led to a severe supply and demand gap within the semiconductor industry. There is insufficient capacity and market pricing is subject to market demand. The market remains in shortage with extending lead times.

PLEASE NOTE: Specific lead time details by manufacturer/ segment can be made available upon request to Central Sourcing





Interconnect

Lead Times are lengthening due to the recovery of the automotive market, and it looks like this will continue for the rest of the year. We are seeing many manufacturers declare allocations. This is not helped by the increased shortages of metal, resin and containers.

Raw material costs such as gold, copper, nickel, aluminum, palladium and resin have also increased. The price list at the end of 2020 had normal general price increases from 2.5 to 6% but with raw material costs, we can now see this increase further and being overruled with further price increases on existing orders ranging from another 5-10%.

We have seen Force Majeure notifications from TE ICT; TE Auto plant; Aptiv; JST France; JAE Allocation Notification (mainly affecting Oregon and Philippines) and Eaton.

Transportation/Freight

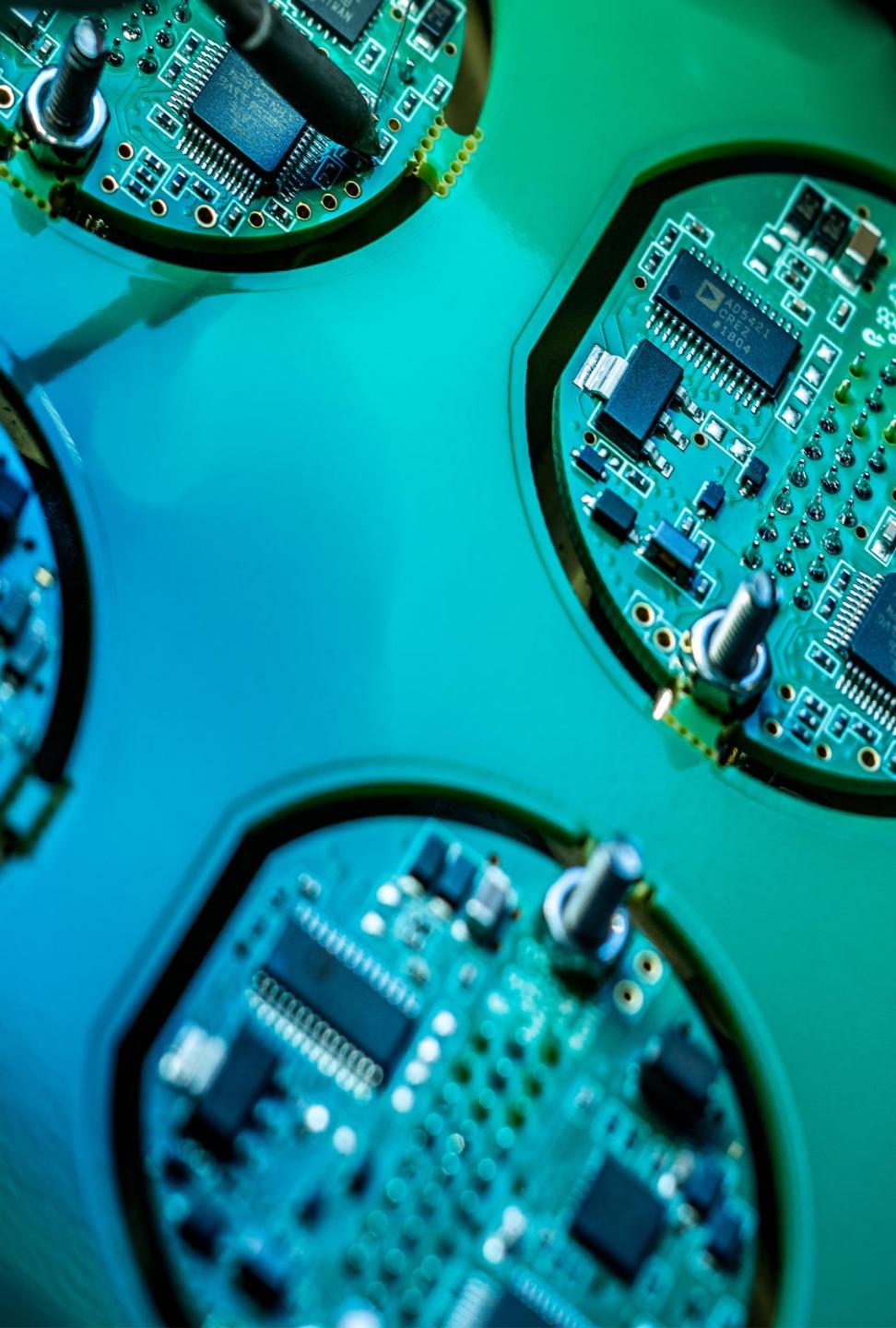
Congestion, logistic bottlenecks and container shortages continue to cause disruption in schedule reliability for freight forwarders. Container freight rates remain at record levels and this has had a knock on effect as schedule reliability fell to its lowest level for the sixth consecutive month (*Source: Sea-Intelligence*)

The demand for exports out of Asia has exceeded expectation and has not allowed supply chain blockages to be resolved. Carriers have had little opportunity to get schedules back on track or clear the storage and port backlogs that have built up.

As a result of the expensive and unreliable ocean freight costs, suppliers are now looking at air cargo but this demand is impacting pricing and increasing the landed cost of goods. High consumer demand has pushed global air cargo volumes back to pre-covid levels. Even at these high rates, some shippers who are desperate for inventory are shifting from ocean to air, an indication of how strained the industry is at the moment.

The unprecedented volumes of imports/exports come at a time when Covid has already reduced the number of freight employees and drivers. This is causing capacity in road freight to tighten and driving rates up. Observers warn that quarantine rules for returning truck drivers could cause significant delays even if goods are ready to be shipped.





PCBS

As you know the entire electronics industry is currently struggling with acute and massive challenges in the supply chain. This is especially relevant for PCBs from Asia. Material requirements are exceeding availability by approx. 50% and are forecasted to continue until at least the end of 2021.

Prices of base materials have more than doubled in the period from June 2020 to June 2021. Further price adjustments are forecasted for the upcoming months.

There has been an increased global copper and copper foil demand and suppliers have low inventories and capacity shortages. The price of copper doubled in the period from March 2020 to February 2021.

Laminate manufacturers have been confronted with substantial price increases for glass fabric, resin and copper and their price validity has reduced to only a few days. Production capacity for Q3 and Q4 2021 remains tight.

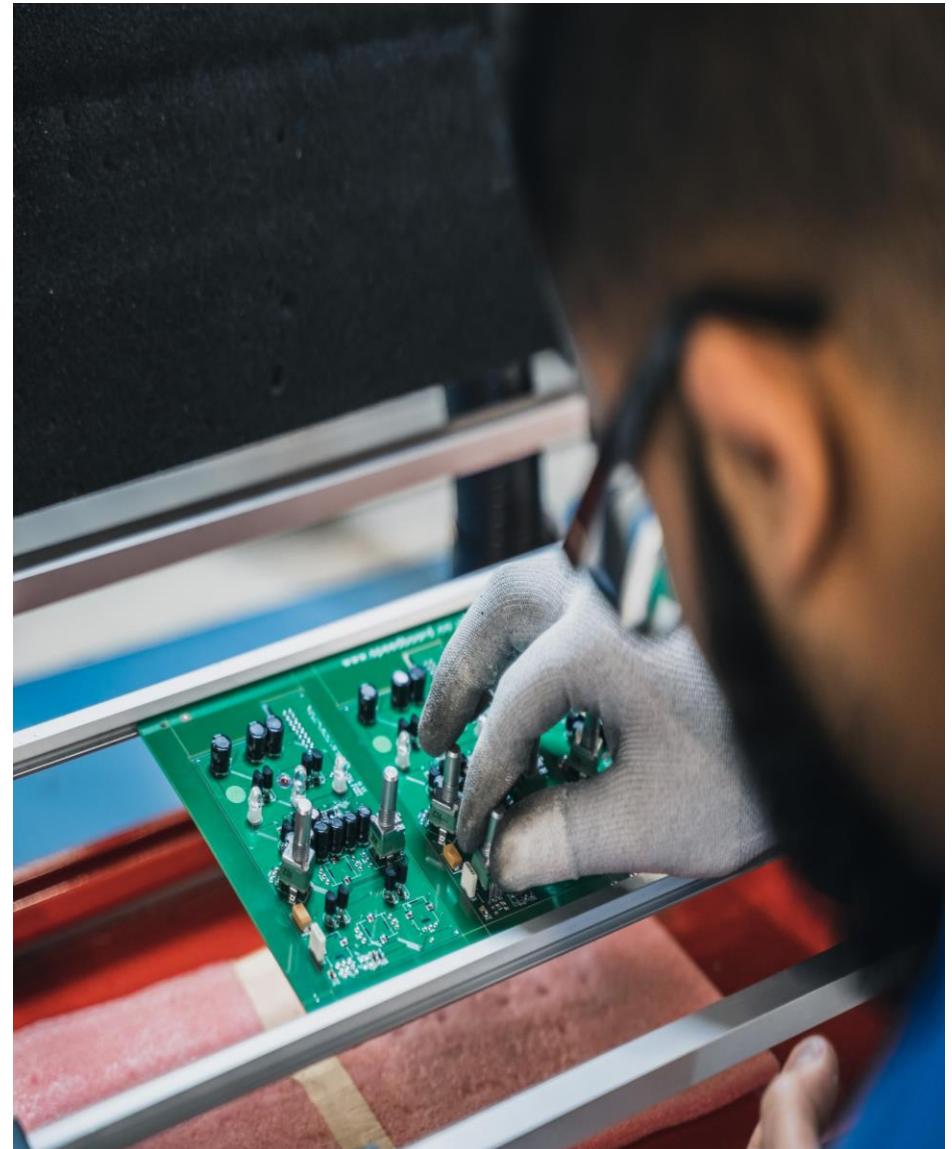
In November 2020, two epoxy resin factories in China exploded and a bisphenol plant in Korea burned down. These are yet to be rebuilt. The reduction in market volume due to supply reduction in the industry and the increase in downstream purchases have caused significant price increases.

How can we help you as a NOTE valued customer

With lead time trends increasing we are receiving acknowledgements from our suppliers that are stretching into 2022 and beyond. For this reason, we are encouraging our customer and OEMs to review their requirements to accommodate these increasing lead times.

If you have orders to place, please place them with some urgency going out 12 months on a rolling basis. We need timely decisions and approvals regarding price rises that clear shortages.

If you can provide us long term visibility with firm orders, the more we can plan with our strategic suppliers and update you with changing market conditions including price increases and lead times.



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